

WHAT IS CLAIMED IS:

1. An image sensor comprising:
 - (a) a photosensitive area that receives incident light for detecting photons; and
 - (b) at least one micro-lens that substantially spans a peripheral region of the photosensitive area, and the at least one micro-lens does not span a central portion of photosensitive area for focusing light from outside the peripheral region to the photosensitive area.
2. The image sensor as in claim 1, wherein the at least one micro-lens is only one micro-lens which is shaped substantially continuous spanning the peripheral region of the photosensitive area and includes a hollowed-out central portion.
3. The image sensor as in claim 1, wherein the photosensitive area is substantially 10 microns or more in width or length.
4. The image sensor as in claim 1, wherein the image sensor is a CMOS or a CCD sensor.
5. A camera comprising:
 - an image sensor comprising:
 - (a) a photosensitive area that receives incident light for detecting photons; and
 - (b) at least one micro-lens that substantially spans a peripheral region of the photosensitive area, and the at least one micro-lens does not span a central portion of photosensitive area for focusing light from outside the peripheral region to the photosensitive area.

6. The camera as in claim 5, wherein the at least one micro-lens is only one micro-lens which is shaped substantially continuous around the peripheral region of the photosensitive area and includes a hollowed-out central portion.

7. The camera as in claim 5, wherein the photosensitive area is substantially 10 microns or more in width or length.

8. The camera as in claim 5, wherein the image sensor is a CMOS or a CCD sensor.